

REMARKS

Claims 1, 2 and 4-11 are pending in this application. By this Amendment, claims 1, 2, 5, and 6 are amended. Support for the amendments to claims 1, 2, 5, and 6 is found at least in paragraph [0087] of Applicants' disclosure. No new matter is added. A Request for Continued Examination is attached. Reconsideration of the application based on the above amendments and the following remarks is respectfully requested.

The Office Action, on page 2, rejects claims 1, 7 and 8 under 35 U.S.C. §102(b) as being anticipated by JP-A-06-027899 to Yamazaki et al. (hereinafter "Yamazaki"). The Office Action, on page 3, rejects claims 2 and 4-6 under 35 U.S.C. §103(a) as being unpatentable over Yamazaki in view of what is alleged to be Applicant's prior art (hereinafter "APA"). The Office Action, on page 7, rejects claims 9-11 under 35 U.S.C. §103(a) over Yamazaki. Applicant respectfully traverses these rejections.

Without conceding the propriety of the rejections in the Office Action, Applicant voluntarily amends independent claims 1, 2, 5 and 6 to even better distinguish the claimed subject matter from the applied references.

Claims 1 and 2 recite, among other features, an inversion logic circuit that includes an input terminal and inverts an input signal supplied to the input terminal to produce an output signal, the input signal being a signal generated at the electrode biased by a predetermined level, the output signal being a binary pulse whose width corresponds to a magnitude relationship of the signal generated at the electrode and the predetermined level. Similar subject matter is recited in claims 5 and 6. At least these features of the independent claims cannot reasonably be considered to be taught, or to have been suggested, by the applied references.

Yamazaki teaches, in Fig. 5, element 531, which is a differential amplifying circuit, as indicated in paragraph [0046] of Yamazaki. Element 531 generates an analog output signal

based on the difference of two input signals. This feature of Yamazaki cannot reasonably be considered to correspond to a binary output signal, as positively recited in the independent claims.

Further, claims 1, 2, 5 and 6 recite that the width of the binary output signal corresponds to a magnitude relationship of the signal generated at the electrode and the predetermined level. This feature is also not taught in Yamazaki because that reference teaches that element 531 generates a differential signal, exemplified in Drawing 4 of Yamazaki. The height of such a differential signal depends on the voltage difference of the two input signals. The height of a binary pulse is the difference between a low and a high voltage (L and H), as exemplified in Fig. 2 of Applicant's disclosure depicting the binary output pulse (Gout).

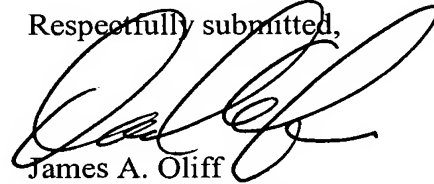
For at least the above reasons, and because there is nothing in APA that can be considered to remedy the above-identified shortfalls in the application of Yamazaki to the subject matter of the pending claims, the applied references cannot reasonably be considered to teach, or to have suggested, the combinations of all of the features positively recited in at least independent claims 1, 2, 5 and 6. Further, claims 4 and 7-11 would also not have been suggested by the applied references for at least the respective dependence of these claims on allowable base claims, as well as for the separately patentable subject matter that each of these claims recites.

Accordingly, reconsideration and withdrawal of the rejections of claims 1, 2 and 4-11 under 35 U.S.C. §§102(b) and 103(a) as being anticipated by, or as unpatentable over, the applied references are respectfully requested.

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1, 2 and 4-11 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



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JAO:DAT:GMH/hs

Attachment:
Request for Continued Examination

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